

## WHAT IS CLAIMED IS:

1. Implant or implant body for regenerating joint defects in a human or animal body, which is formed with a supporting body (1) of a body tolerated material which comprises a porous or spongy structure, particularly of a spongy bone of human or animal origin, and which is, at least partially, able to be impregnated or is impregnated with a suspension of tissue cells, characterized in that the implant or the implant body is provided with a supporting body (1) having channels (3) beginning at a partial area of its surface (2) and ending within it for infiltrating the respective tissue cell suspension provided for regeneration.
2. Implant according to claim 1, characterized in that the supporting body is impregnated with a cartilage (tissue) cell suspension.
3. Implant according to claim 1 or 2, characterized in that the infiltrating channels (3) have a hollow cylindrical shape and a diameter in the range of 300 to 500  $\mu\text{m}$ , or, as is preferred, begin at the surface (2) of the supporting body (1) and have a tapering pointed cone or pointed conical or pointed frustum-like shape in the direction to the interior of the supporting body, and each having a diameter (dm) in the center of 200 to 500  $\mu\text{m}$ .
4. Implant according to of claims 1 to 3, characterized in that the depth of the infiltrating channels (3) amounts to the 3 to 10-fold, particularly the 5 to 10-fold of their diameter or center diameter (dm).
5. Implant according to of claims 1 to 4, characterized in that the supporting body (1) has a cylindrical shape, infiltrating channels (3) beginning at least from its basic and/or cover surface (2).
6. Implant according to of claims 1 to 5, characterized in that that basic and/or cover surface (2) of the cylindrical supporting body (1) where the infiltration channels (3) begin, is vaulted in a convex shape.
7. Implant according to of claims 1 to 6, characterized in that that area of the supporting body (1), in case it is formed of bone material, which is impregnated with the cartilage cell suspension is at least partially demineralized.

8. Method for producing an implant or implant body which is at least partially impregnated with cultured cartilage cells for regenerating joint defects in a human or animal body, according to any of claims 1 to 7, characterized in that, starting from at least one partial area of its surface, infiltration channels (3) are introduced or deepened into the supporting body (1), for example by mechanical boring, by a laser beam or by a pressurized water jet, after which at least this partial area of the supporting body (1) is introduced or immersed into a suspension which contains the respective cells to be resettled, preferably cultured cartilage cells, wherein it is preferred that the supporting body (1), after introducing it into the cartilage cell suspension, is subjected to a pressure below ambient pressure or to a vacuum.
9. Method according to claim 8, characterized in that at least that area of the supporting body (1), which is to be impregnated with the cell or cartilage cell suspension, before impregnation is subjected to a cleaning and/or demineralizing procedure, wherein it is preferred to proceed in such a manner that at least the area to be impregnated of the supporting body (1) is introduced into an acidiferous demineralization medium, particularly 0.5 N hydrochloric acid, and is subjected to a pressure below ambient pressure or to a vacuum, after which the demineralization medium and the salts, contained therein and being eliminated from the bone by the demineralization, are removed by rinsing.
10. Method according to claim 8 or 9, characterized in that at least the area to be impregnated of the supporting body (1), before being impregnated with the cell or cartilage cell suspension, is soaked with a nutrient favoring the development of cells or cartilage cells, for example hyaluronic acid or collagen, or that the impregnation of the supporting body is effected with a mixture of a cell or cartilage cell suspension and a medium that favors the development of cells or cartilage cells, such as hyaluronic acid or collagen.
11. The use of an implant which contains cultured cells, preferably cartilage cells according to any of claims 1 to 7 or such an implant produced in accordance with any of claims 8 to 10 for regenerating joint defects in a human or animal body, wherein at least one recess, deepening or the like is formed in the region to be implanted of the bone forming the joint, and the implant (1) or its implant body is inserted into said recess, deepening or the like, preferably with snug fit.
12. The use of an implant or an implant body for the purpose mentioned in claim 11, wherein a plurality of recesses, deepenings or the like are arranged, preferably in a mo-

saic-like form, in the region provided for implantation of a bone, into each of them an implant or implant body according to any of claims 1 to 7 or to any of claims 8 to 10 is inserted, preferably fitted.